ABSTRACT

Techniques to rotate the phase of a received signal to compensate for phase change or discontinuity introduced by circuit elements located directly in the receive signal path. One or more control signals are received, with each control signal being provided to adjust a particular characteristic of one or more circuit elements associated with the receive signal path. A phase rotation corresponding to an operating state defined by the control signals is then determined, and the phase of the received signal is rotated by an amount related to the determined phase rotation. In some designs, the phase rotation is performed on digitized inphase I_{IN} and quadrature Q_{IN} samples to generate phase rotated I_{ROT} and Q_{ROT} samples. The phase rotation can be performed by a complex multiply (after DC offset compensation) and, for ease of implementation, can be performed digitally in discrete increments (e.g., 90° increments).